From: **Cynthia Caporale/ESC/R3/USEPA/US**
Sent: 7/17/2012 5:04:19 PM

To: Kelley Chase/R3/USEPA/US@EPA
CC:
Subject: Fw: Revised Final - SERAS Validation Procedures Memo

Comments to revised Final - SERAS Validation Procedures. I will have another email with add'l comments.

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----- Forwarded by Cynthia Caporale/ESC/R3/USEPA/US on 07/17/2012 05:03 PM -----

From: Dave Russell/ESC/R3/USEPA/US
To: Cynthia Caporale/ESC/R3/USEPA/US@EPA
Cc: Cynthia Metzger/ESC/R3/USEPA/US@EPA, Fred Foreman/ESC/R3/USEPA/US@EPA, Robin Costas/ESC/R3/USEPA/US@EPA
Date: 07/17/2012 03:16 PM
Subject: Re: Fw: Revised Final - SERAS Validation Procedures Memo

Cindy,

Comments on SERAS Validation Procedures:

page 7. Method Blank Action for HPC. Believe I corrected this once before. Correction was not incorporated. SDWA Lab Cert. Manual clearly states in paragraph 5.5.12 that "data should be rejected if control is contaminated." See p. V-24 in the Manual: http://www.epa.gov/ogwdw/methods/pdfs/manual_labcertification.pdf Therefore, action for ">RL" should be "Reject data". Action for "No Associated Method Blank" should be "Reject data" since 1.) the method was not followed, and 2.) it cannot be confirmed that the CFUs observed on the sample plates were not from laboratory contamination. This is so basic. A "control" is fundamental to the scientific method. At the end of the HPC experiment, a blank control is what confirms the CFUs seen on a sample plate are from the sample.

page 7. For the record, I have checked and I know of no EPA microbiology guidance that states a "field blank" should be collected with microbiology samples. A field blank is apparently a chemistry requirement that was transferred to microbiology. If they would like to delete that table, I would have no objection.

page 16. Change title of table at the bottom to "Holding Time Action for Fecal Coliform and E. coli" . Method used in May did not detect Fecals, but rather E. coli. Total coliforms could also be added ".....Total Coliforms, Fecal Coliforms and E. coli" since TC analyses were also done. Actions the same.

page 17. Same comment as for page 16.

Finally, I don't agree that these QC items are the only things that should be checked in a validation of micro data. I've made this point before. The items included in the SERAS Validation Procedures are only those issues with which I had found problems, and thus, had included in my reports. Just for the record the validations I performed included review of additional QC and method elements.....see checklists attached. Some of the items on my lists were included to confirm that the lab followed the method specified.....which means one must be familiar with the methods and what they require in terms of incubation period, incubation temperature, etc., etc.

[attachment "HPCQCtable.docx" deleted by Cynthia Caporale/ESC/R3/USEPA/US] [attachment "TCEcoliQCtable.docx" deleted by Cynthia Caporale/ESC/R3/USEPA/US] [attachment "TCFCQCtable.docx" deleted by Cynthia Caporale/ESC/R3/USEPA/US]

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From: Cynthia Caporale/ESC/R3/USEPA/US
To: Dave Russell/ESC/R3/USEPA/US@EPA, Robin Costas/ESC/R3/USEPA/US@EPA
Cc: Fred Foreman/ESC/R3/USEPA/US@EPA, Cynthia Metzger/ESC/R3/USEPA/US@EPA
Date: 07/16/2012 03:58 PM
Subject: Fw: Revised Final - SERAS Validation Procedures Memo

Dave and Robin,

The revised technical memo incorporated our comments. Please review and let me know if we have any additional comments/concerns.

We have been requested to complete/comment on all documents by Wednesday.

Thanks,
Cindy

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----- Forwarded by Cynthia Caporale/ESC/R3/USEPA/US on 07/16/2012 03:56 PM -----

From: Kelley Chase/R3/USEPA/US
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Cc: Gerald Heston/R3/USEPA/US@EPA, Richard Fetzer/R3/USEPA/US@EPA
Date: 07/16/2012 01:44 PM
Subject: Revised Final - SERAS Validation Procedures Memo

Hi Cindy -

The SERAS contractor revised their technical memo to address comments from the lab provided in the attached e-mail as well as the supplemental comments on the micro data sent via e-mail on June 7th.

The revised memo is attached. Based on my review, it appears that the contractor has adequately address all comments. However, since these are the lab's comments, I would appreciate it if you would confirm that the revised memo is acceptable.

Thank you - Kelley

[attachment "SERAS Data Validation Criteria_071312.docx" deleted by Dave Russell/ESC/R3/USEPA/US]

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To: Kelley Chase/R3/USEPA/US@EPA
Cc: Cynthia Metzger/ESC/R3/USEPA/US@EPA, Fred Foreman/ESC/R3/USEPA/US@EPA, Dave Russell/ESC/R3/USEPA/US@EPA, Sue Warner/ESC/R3/USEPA/US@EPA, Jill Bilyeu/ESC/R3/USEPA/US@EPA
Date: 06/07/2012 02:53 PM
Subject: OASQA Comments to Dimock Residential GW Site Executive Summary, Technical Summary, and SERAS Validation Procedures

Kelley,

Thank you for the opportunity to review these documents. Below are our comments.

Draft Technical Summary Comments (Micro & Chemistry):

P.4 2. Heterotrophic Plate Count Analysis - Heterotrophic Plate Count (HPC) is an analytic method used to measure the

abundance of heterotrophic bacteria in a water sample. Heterotrophic bacteria include all bacteria that consume organic compounds in order to survive and grow. Although the HPC includes a variety of bacteria, it does not include all bacteria in a water sample. The lower the concentration of the .....

[in next paragraph:]

Samples were analyzed for bacteria so that information would be available should EPA....

.....the severity of bacterial contamination can be made.....

For Micro HPC/FC--another check that goes along with method blanks is a sterility check. No mention in the tables. Many other micro QC items that are done at R3 lab are not included, for example, media checks, reagent water checks, culture controls and the like.

For Chemistry-- no mention of 1) second source verifications, 2)retention time window selectivity, or 3) tuning

SERAS Data Validation

1. In the parameter table on page 3, "phosphorous" should be "phosphorus".

2. The blank action tables actions for volatiles, SVOA and pesticides do not match for when the sample result is ≥RL and ≥ blank concentration. Also, for the SVOA blank table, > blank should be ≥ blank. Should the SVOA and volatiles blank tables action for samples say "U if <5x blank" for when the blank result =RL and the sample result is ≥RL?

3. For initial calibration, linear and quadratic actions for VOAs and SVOAs are not the same. Recommend to use the average RRF as noted in the SVOA table.

4. For the initial calibration table for pesticides, I think that when the initial calibration is not performed, the action should be "R", not professional judgment.

5. For the continuing calibration tables for VOAs and SVOAs, it seems that the "U" under the actions for non-detected compounds should be "UJ".

Re: Fw: Draft Final SERAS Data Validation Procedures Memo

Cynthia Metzger to: Caporale.Cynthia

[attachment "6-5-12 Revised DRAFT QA Review Process Exec Summary_comments.docx" deleted by Kelley Chase/R3/USEPA/US] [attachment "SERAS Data Validation Criteria_053012_Draft_comments.docx" deleted by Kelley Chase/R3/USEPA/US]

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